Amendments to the Claims:

Claims 13, 17 and 18 are currently amended. Claims 1 – 3, 5 and 14 – 16 are previously presented. Claims 4 and 6 – 12 are original. No new matter is added by these amendments. Consideration of all amendments is respectfully requested.

5 **Listing of Claims:**

Claim 1 (previously presented): A method for controlling a stepping motor in an optical storage system, which comprises a pick-up head for achieving a short seek, and an object lens, the method comprising:

calculating a number of steps that the stepping motor should rotate;

10 moving the pick-up head toward a target position by having the stepping motor rotate according to the number of steps;

determining a shift distance between the object lens and the center of the pick-up head; and

selectively stopping movement of the pick-up head according to the shift

15 distance before the short seek is achieved.

Claim 2 (previously presented): The method of claim 1, wherein the pick-up head is placed on a sled, the sled being electrically connected to the stepping motor, and the step of moving the pick-up head toward a target position by having the

20 stepping motor rotate according to the number of steps further comprises:

utilizing the stepping motor for driving the sled to move the pick-up head toward the target position.

Claim 3 (previously presented): The method of claim 1, further comprising moving the

25 object lens toward a target track.

Claim 4 (original): The method of claim 3 further comprising:

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moving the object lens from an initial track to the target track according to a

predetermined speed; and

determining at least one step according to a distance between the initial track and

the target track.

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Claim 5 (previously presented): The method of claim 3, wherein the step of selectively

stopping movement of the pick-up head according to the shift distance further

comprises:

stopping utilizing the stepping motor to move the pick-up head if the shift

10   distance is lower than a predetermined shift range, while the object lens has

not reached the target track, and the stepping motor has not rotated according

to the number of steps; and

utilizing the stepping motor to move the pick-up head if the shift distance is

greater than the predetermined shift range, while the object lens has not

15   reached the target track, and the stepping motor has not rotated according to

the number of steps.

Claim 6 (original): The method of claim 1, wherein the optical storage system further

comprises a control module for controlling operations of the stepping motor, the

20   pick-up head, and the object lens.

Claim 7 (original): A method of achieving a short seek in an optical storage system, the

optical system having a stepping motor, a pick-up head, and an object lens, the

method comprising:

25   (a) calculating a number of steps that the stepping motor should rotate;

(b) after step (a), utilizing the stepping motor to move the pick-up head toward a

target position and move the object lens toward a target track at the same time;

(c) determining if the object lens has reached the target track, wherein the short

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seek is finished if the object lens has reached the target track; otherwise, step

(d) is performed; and

(d) continuing to move the object lens until the pick-up head has reached the

target position and then returning to step (c); otherwise, repeating step (d).

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Claim 8 (original): The method of claim 7 further comprising:

(e) during step (d), when the pick-up head has not reached the target position and

the object lens has not reached the target track, checking if a shift distance is

lower than a predetermined shift range; if true, then stopping utilizing the

10   stepping motor to move the pick-up head; otherwise, going to step(f); and

(f) continuing to utilize the stepping motor to drive the pick-up head according to

a predetermined speed, and then returning to step (e);

wherein the shift distance is between the object lens and a center of the pick-up

head.

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Claim 9 (original): The method of claim 7, wherein the pick-up head is placed on a sled,

the sled is electrically connected to the stepping motor, and step (b) utilizes the

stepping motor to drive the sled.

20   Claim 10 (original): The method of claim 7 further comprising:

(g) in step (b), moving the object lens from an initial track to the target track

according to a predetermined speed curve; and

(h) in step (b), calculating the number of steps that the stepping motor should

rotate according to a distance between the initial track and the target track.

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Claim 11 (original): The method of claim 7, wherein the stepping motor and the object

lens move along a radial direction in step (b).

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Claim 12 (original): The method of claim 7, wherein the optical storage system further comprises a control module for controlling operations of the stepping motor, the pick-up head, and the object lens.

5   Claim 13 (currently amended): An optical storage system comprising:

a sled placed movably in the optical storage system;

a pick-up head placed on the sled;

an object lens placed movably on the pick-up head;

a stepping motor electrically connected to the sled for driving the sled to move

10   the pick-up head and stopping the sled and the pick-up head when a shift

distance corresponding to a distance between the pick-up head and the object

lens is lower than a predetermined range[[,]] ; and

a control module electrically connected to the stepping motor, the pick-up head,

and the object lens for controlling operations of the stepping motor, the

15   pick-up head, and the object lens and determining the shift distance and the

predetermined range.

Claim 14 (previously presented): The optical storage system of claim 13, wherein the sled and the object lens move along a radial direction.

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Claim 15 (previously presented): The optical storage system of claim 13, wherein the shift distance is a distance between the object lens and a center of the pick-up head.

25   Claim 16 (previously presented): The optical storage system of claim 13, wherein the stepping motor is implemented for a short seek.

Claim 17 (currently amended): An optical storage system comprising:

a sled placed movably in the optical storage system;

a pick-up head placed on the sled;

an object lens placed movably on the pick-up head;

a stepping motor, electrically connected to the sled, for driving the sled to move

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the pick-up head if a shift distance corresponding to a distance between the
pick-up head and the object lens is greater than a predetermined range and
the object lens has not reached a target position, and stopping the sled and the
pick-up head when the shift distance is lower than the predetermined range
and the object lens has not reached the target position; and

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a control module electrically connected to the stepping motor, the pick-up head,
and the object lens for calculating a number of steps that the stepping motor
should rotate and controlling operations of the stepping motor, the pick-up
head, and the object lens and determining the shift distance and the
predetermined range.

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Claim 18 (currently amended): A method for controlling a stepping motor in an optical
storage system, which comprises a pick-up head for achieving a short seek and
an object lens placed movably on the pick-up head, the method comprising:

calculating a number of steps that the stepping motor should rotate;

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moving the pick-up head toward a target position by having the stepping motor
rotate according to the number of steps;

moving the object lens toward a target track;

comparing a shift distance corresponding to a distance between the pick-up
head and the object lens with a predetermined shift range;

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stopping utilizing the stepping motor to move the pick-up head if the shift
distance is lower than [[a]] the predetermined shift range, while the object
lens has not reached the target track, and the stepping motor has not rotated
according to the number of steps; and

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utilizing the stepping motor to move the pick-up head if the shift distance is

greater than the predetermined shift range, while the object lens has not

reached the target track, and the stepping motor has not rotated according to

the number of steps.

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